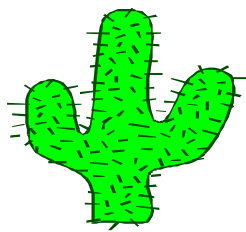


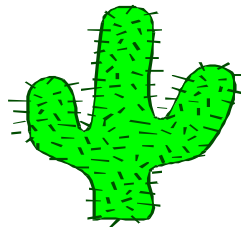
Survival of the Fittest

Science Performance Task

Middle School Level



by



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Survival of the Fittest

Purpose: This performance task is intended to be used as a culminating and /or extension activity following a series of lessons about the role of adaptation in the survival of species. The student will construct an argument that supports the prediction on a specific vertebrate that will not adapt to its changing environment and will become extinct. The students will need to research, collect data, and use information obtained from several sources to create a written paper that persuades an audience to aid in the preservation of a specie's habitat.

Level: Middle School

Subject: Science

Show-Me Standards Addressed:

Content Standards: Sc3, Sc4

Process Standards: 1.2, 2.1

Materials Needed: pencil, Performance Task Packet (which contains the Student Prompt, the Response Sheets, and the Scoring Guide).

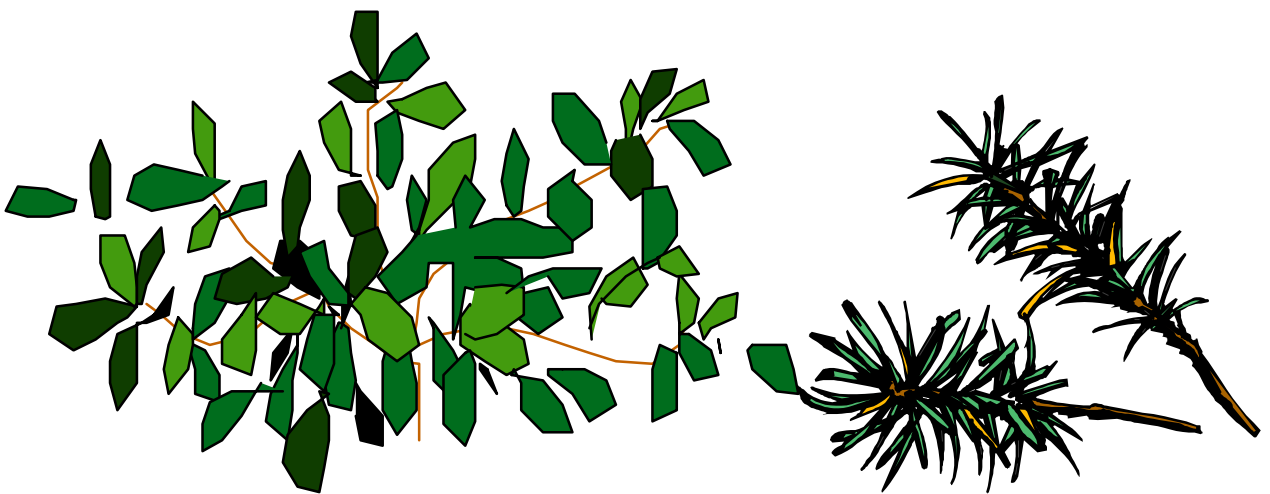
Time Needed for Task: 3-4 class periods

Instructions for Administration: Present students with the Performance Task Packet and make sure they clearly understand what is expected. Go over the scoring guide to ensure students know what is meant by quality. Take students to the library to allow time for research.

Pre-Assessment Instructions: Prior to the administration of this performance task, students will need to have the prerequisite knowledge of researching a topic, constructing support for a claim, and having an understanding of the role of adaptation in the survival of species. A brief review of climate zones, environment, habitats, and pollution should be done prior to the administration of the task. The students will then be taken to the library to research their topic in more detail.

Survival of the Fittest

You are a conservationist making a written presentation. Your presentation should convince a specific group to help preserve an animal habitat. You will need to research, collect data, and use information obtained from several sources. Choose one habitat and present arguments that will support a prediction about one vertebrate that will not adapt to that changing habitat. Use research data to write a persuasive paper that tells what habitat should be preserved and give the reasoning to support your plea for habitat preservation.



[illegible]

Write a persuasive paper that tells what habitat should be preserved. Support your plea/ request with a prediction about one vertebrate that will not adapt to that changing habitat. Support your plea with data obtained from your research.

Scoring Guide: Survival of the Fittest

Your understanding of the role of adaptation in the survival of the species.

- 4 Displays a thorough and accurate understanding of the role of adaptation in the survival of the species.
- 3 Displays an understanding of the role of adaptation in the survival of the species.
- 2 Displays a partial or incomplete understanding of the role of adaptation in the survival of the species.
- 1 Displays little or no understanding of the role of adaptation in the survival of the species. Severe misconceptions were noted.

Your ability to construct an argument that supports a prediction on a vertebrate that will not adapt to its changing environment and will become extinct.

- 4 Articulates a detailed position and has strong ecological reasoning behind the prediction that a specific vertebrate will not adapt to its changing environment.
- 3 Articulates a position and has ecological reasoning behind the prediction that a specific vertebrate will not adapt to its changing environment.
- 2 Articulates a position and does not have strong ecological reasoning behind the prediction that a specific vertebrate will not adapt to its changing environment.
- 1 May or may not articulate a position but it is incomplete and/ or difficult to understand. There is no ecological reasoning behind the prediction that a specific vertebrate will not adapt to its changing environment.

Your ability to create a written paper that presents relevant information in a way that effectively persuades your audience to accept your predictions and aid in the preservation of a specie's habitat.

- 4 Creates a written paper that clearly and effectively communicates the main idea or theme supported by rich, vivid, and relevant details gathered as a result of the research. The paper has a keen sense of direction.
- 3 Creates a written paper that communicates the main idea or theme and that is supported with relevant details gathered as a result of the research. It may lack focus at one or two points that are not distracting to the reader.
- 2 Creates a written paper that communicates some information but a clear theme is not evident or irrelevant details may be included. Little or no research data may be included. The paper lacks focus or a sense of direction.
- 1 Creates a paper that shows severe misconceptions and does not address the task.